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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,186

04/18/2006

Anders Hallin

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PEARNE & GORDON LLP  
1801 EAST 9TH STREET  
SUITE 1200  
CLEVELAND, OH 44114-3108

EXAMINER

RAHIM, AZIM

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,186	<b>Applicant(s)</b> HALLIN, ANDERS	
	<b>Examiner</b> AZIM RAHIM	<b>Art Unit</b> 3744	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the device for ice fabrication, the ice fabrication device being exposed to air circulating in the high temperature compartment and means provided for melting frost as recited in claim 1; the heating means as recited in claim 8; and the condenser, boiler and absorber as recited in claims 8 and 9** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

2. Claim 4 is objected to because of the following informalities: In claim 4, line 2, the recitation “of” should be corrected to recite --of--. In claim 6, line 3, a comma --,-- should be inserted after the recitation “first tube section.” Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dreier (US 2,743,588) in view of Backstorm (US 2,631,443).

Regarding claim 1, Dreier discloses an absorption refrigerator refrigerating system (referring to figure 1) including a cabinet (20) encasing a low temperature storage compartment (18) and a higher temperature storage compartment (24), said compartments being separated by a

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partition wall (26), an ice maker (ice mold 22); the absorption refrigerating system includes an evaporator tube (13) in which a refrigeration medium flows from an upstream end to a downstream end of the evaporator tube, and which evaporator tube comprises a first tube section (13a) which is arranged to absorb heat from the low temperature compartment (illustrated in figure 1), a second tube section (13c), which is arranged to absorb heat from the higher temperature compartment (illustrated in figure 1) and a third tube section (13b) which is arranged to absorb heat from the ice fabrication device, wherein the first, second and third tube sections are connected in series (illustrated in figure 1) and, within the evaporator tube, the first tube section is arranged upstream of the second tube section (illustrated in figure 1; see arrows), characterized in that said third tube section is arranged to predominantly absorb heat from the ice fabrication device by heat conduction (as illustrated in figure 1, tube section 13b is capable of performing this intended use function) and, within the evaporator tube, the third tube section is arranged downstream of said first tube section (illustrated in figure 1) and upstream of said second tube section (illustrated in figure 1) and in that the ice fabrication device is exposed to air circulating in the low temperature compartment (illustrated in figure 1). However, Dreier fails to disclose means provided for melting frost generated by humidity in said low temperature compartment or said higher temperature compartment respectively. Backstorm teaches the well known concept of providing a heater that defrosts a low temperature compartment evaporator (see column 4, lines 55-66). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the refrigerator of Dreier to include the defrost heater as taught by Backstorm in order to maintain cooling efficiency by preventing frost from building up on the evaporator.

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Regarding claim 2, Dreier further discloses that the first and third tube sections are arranged in the low temperature compartment (illustrated in figure 1) and the second tube section is arranged in the higher temperature compartment (illustrated in figure 1).

Regarding claim 3, Dreier further discloses that the third tube section is arranged in a separate ice fabrication compartment which communicates with the low temperature compartment (illustrated in figure 1).

Regarding claim 4, Dreier further discloses that the upstream end of the third tube section is connected directly to the downstream end of the first tube section (illustrated in figure 1).

Regarding claim 5, Dreier further discloses that the upstream end of the second tube section is connected to the downstream end of the third tube section through a passive gas heat exchange tube section (13e), which is arranged inside the partition wall of the cabinet (illustrated in figure 1).

Regarding claim 6, Dreier further discloses that the first tube section includes two non-coaxial tube portions (portions of tube section 13a that bends at a 90 degree angle extending from the top of compartment 18 to the middle rear of compartment 18, wherein each straight portion on each side of the bend constitutes a separate section), the axis of which together define a general extension plane of the first tube section (illustrated in figure 1) and the third tube section includes two non-coaxial tube portions (portions of tube section 13b that bends at a 90 degree angle extending from the far side of compartment 18 through the front portion of compartment 18 to and through the near side of compartment 18 extending to the rear of compartment 18, wherein each straight portion on each side of the bend constitutes a separate section), the axis of which together define a general extension plane of the third tube section

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(illustrated in figure 1), whereby said general extension plane of the first tube section is essentially perpendicular to the general extension plane of the third tube section (illustrated in figure 1).

Regarding claim 7, Dreier further discloses that the general extension plane of the first tube section is essentially vertical and generally parallel to the general extension plane of the partition wall (illustrated in figure 1). It is noted that wall 26 extends in 3 planes, and wall 26 reads on the claimed partition wall based upon this interpretation.

Regarding claim 8, Dreier further discloses that the ice fabrication device includes heating means for effecting partial melting of the ice for facilitating harvesting of the ice (see column 6, lines 42-46).

Regarding claim 9, Dreier further discloses a boiler (generator10), a condenser (12), and an absorber (15).

Regarding claim 10, Dreier further discloses that the upstream end of the evaporator tube connected to the condenser (illustrated in figure 1) and the downstream end of the evaporator tube connected to the absorber (illustrated in figure 1).

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

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*Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of Hallin et al. (Hallin, US 6,845,631) in view of Dreier and Backstorm. Hallin discloses all the limitations of claim 1, except for the third tube section disposed between the first and third tube sections in the low temperature compartment near an ice fabrication device, and means being provided for melting frost in the low or high temperature compartments. However, Dreier teaches in figure 1 a third tube section (13b) located in a low temperature compartment (18) and disposed near an ice mold (22). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the refrigerator of Hallin to include the third tube section and ice fabrication device as taught by Dreier in order to conveniently provide ice for a user. Also, Backstorm teaches the well known concept of providing a heater that defrosts a low temperature compartment evaporator (see column 4, lines 55-66). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the refrigeration of Hallin as modified by Dreier to include the defrost heater as taught by Backstorm in order to maintain cooling efficiency by preventing frost from building up on the evaporator.

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hallin (US 2005/0011222); Siedle (US 2,345,505); Ullstrand (US 2,269,701); Coons (US 2,560,790); Coons (US 2,520,530); Munters (US 1,910,853) and Piper (US 2,597,813).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIM RAHIM whose telephone number is (571) 270-1998. The examiner can normally be reached on Monday - Thursday 7am - 3pm EST and Friday 7am - 9:30am EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules or Cheryl Tyler can be reached on 571-272-6681 and 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. R./

Examiner, Art Unit 3744

12/28/2009

/Frantz F. Jules/

Supervisory Patent Examiner, Art Unit 3744